



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/721,880

11/27/2000

James R. Henshaw

107979

4029

25944

7590

11/29/2002

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

GUADALUPE, YARITZA

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/721,880

Applicant(s)

HENSHAW ET AL.

Examiner

Yaritza Guadalupe

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

### **DETAILED ACTION**

In response to the Supplemental Response and Attachment filed September 23, 2002.

#### ***Election/Restrictions***

1. This application contains claims 11 - 18 drawn to an invention nonelected with traverse in Paper No. 10. A complete reply to the present Office Action must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19 - 28 are rejected under 35 U.S.C. 103 ( a ) as being unpatentable over Morrison et al. ( US 5,063,685 ) in view of Reilly ( US 5,826,346 ).

Morrison et al. discloses an apparatus comprising a measurement scale ( 26 ), a read-head ( 54 ) relatively moveable along the scale for reading the scale ( See Column 2, lines 2 – 7 ), and an elongate track ( 50 ) for holding the measurement scale.

Morrison et al. does not discloses the elongated track having a channel and magnetic material disposed in the channel for magnetically attracting the scale as stated in claims 19, 20, 22 - 24 and 27 - 28. Morrison et al. does not discloses the ferrite rubber material as stated in claim 21. Morrison et al. does not discloses the scale being magnetic or magnetisable as stated in claim 26. Morrison et al. does not discloses the track made of aluminum as stated in claim 24. Morrison et al. does not discloses the track made of magnetic ferrite rubber as stated in claim 25.

With respect to claims 19, 20, 22 - 24 and 26 - 28: Reilly discloses an elongate track (12) for holding a measuring scale, the track having a channel / slot ( 58 ) wherein the track is adapted for attracting magnetically, by means of a magnetic material / strip ( 62 ) disposed on the channel / slot, a magnetisable scale ( 60 ) to the track ( See Column 3, lines 56 – 62 ), the track being extruded ( See Column 2, lines 65 – 66 ), and a scale tensioner ( 64, 66 ) for tensioning the scale on the track ( See Columns 3 and 4, lines 65 – 67 and 1 – 7 respectively ). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace elongated track disclosed by Morrison et al. with an elongated track and magnetic slot as taught by Reilly in order to properly and securely retain in position the scale by providing a primary and secondary means for attachment that will avoid unexpected displacement during measurements.

With respect to claim 21 : Morrison et al. and Reilly disclose a magnetic material / strip (62) but does not disclose the particular magnetic material / strip used. The use of the particular type of magnetic material claimed by applicant, i.e., ferrite rubber, absent any criticality, is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as a magnetic material is provided for securely attaching the scale into the channel, as already suggested by Morrison et al. and Reilly, 2) the magnetic material claimed by Applicant and the magnetic material used by Morrison et al. and Reilly are well known alternate types of magnetic materials which will perform the same function, if one is replaced with the other, of securely attaching the scale into the channel, and 3) the use of the particular type of magnetic material by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of magnetic material that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to securely attach the scale into the channel as already suggested by Morrison et al. and Reilly.

Regarding claims 24 - 25 : Morrison et al. and Reilly discloses a measuring gage but does not disclose the particular material used to make the track ( 12 ). The particular type of material used to make the track, absent any criticality, is only considered to be the use of a “ preferred ” or “ optimum ” material out of a plurality of well known materials that a person having ordinary

Art Unit: 2859

skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus. See In re Leshin, 125 USPQ 416 (CCPA 1960 ) where the court stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious.

4. Claims 19 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelle (US 5,511,321 ) in view of Reilly ( US 5,826,346 ).

Nelle discloses an apparatus comprising a measurement scale ( 1 ), a read-head / scanning device ( 8 ) relatively moveable along the scale for reading the scale ( See Column 2, lines 40 – 43 ), and an elongate track ( 2 ) having a channel / groove for holding the measurement scale (See Column 2, line 31 ). Nelle further discloses a scale tensioner ( 3 ) including a preloadable member ( 3a ) operable to urge the scale into tension and a resilient part and loading part for preloading and releasing the preload.

Nelle does not discloses the magnetic material disposed in the channel for magnetically attracting the scale as stated in claims 19, 20, 22 - 24 and 27 - 28. Nelle does not discloses the ferrite rubber material as stated in claim 21. Nelle does not discloses the scale being magnetic or magnetisable as stated in claim 26. Nelle does not discloses the track made of aluminum as

Art Unit: 2859

stated in claim 24. Nelle does not disclose the track made of magnetic ferrite rubber as stated in claim 25.

With respect to claims 19, 20, 22 - 24 and 26 - 28 : Reilly discloses an elongate track (12) for holding a measuring scale, the track having a channel / slot ( 58 ) wherein the track is adapted for attracting magnetically, by means of a magnetic material / strip ( 62 ) disposed on the channel / slot, a magnetisable scale ( 60 ) to the track ( See Column 3, lines 56 - 62 ), the track being extruded ( See Column 2, lines 65 - 66 ), and a scale tensioner ( 64, 66 ) for tensioning the scale on the track ( See Columns 3 and 4, lines 65 - 67 and 1 - 7 respectively ). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace elongated track disclosed by Nelle with an elongated track and magnetic slot as taught by Reilly in order to properly and securely retain in position the scale by providing a primary and secondary means for attachment that will avoid unexpected displacement during measurements.

With respect to claim 21 : Nelle and Reilly disclose a magnetic material / strip ( 62 ) but does not disclose the particular magnetic material / strip used. The use of the particular type of magnetic material claimed by applicant, i.e., ferrite rubber, absent any criticality, is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as a magnetic material is provided for securely attaching the scale into the channel, as already suggested by Nelle and Reilly, 2) the magnetic

Art Unit: 2859

material claimed by Applicant and the magnetic material used by Nelle and Reilly are well known alternate types of magnetic materials which will perform the same function, if one is replaced with the other, of securely attaching the scale into the channel, and 3) the use of the particular type of magnetic material by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of magnetic material that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to securely attach the scale into the channel as already suggested by Nelle and Reilly.

Regarding claims 24 - 25 : Nelle and Reilly discloses a measuring apparatus having a track ( 1 ) made of an alloy but also gives the option of using glass, ceramics or any other suitable material ( See Column 2, lines 45 and 65 – 67 ). The particular type of material used to make the track, absent any criticality, is only considered to be the use of a “ preferred ” or “ optimum ” material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant’s apparatus, i.e., suitability for the intended use of Applicant’s apparatus. See In re Leshin, 125 USPQ 416 (CCPA 1960 ) where the court stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious.



*Response to Arguments*

5. Applicant's arguments with respect to claims 19 - 30 have been considered but are moot in view of the new ground(s) of rejection.
- 

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ernst ( US 4,912,856 ) discloses a position-measuring device comprising a scale (M1), a track ( G1 ) for receiving the scale and made of aluminum (See Column 4, line 22 ), and a scale tensioner including a preloadable member ( See Column 5, lines 59 – 67 ). Affa ( US 4,554,741 ) discloses a measuring system having a scale ( M ) disposed on a track ( G ), a read-head / scanning unit ( A ) and fastening elements ( B1, B2 ) for securing the scale to the track.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe whose telephone number is (703)305 -5676.

The examiner can normally be reached on 9:00 AM - 6:30 PM.

Art Unit: 2859

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Yaritza Guadalupe  
Patent Examiner  
Art Unit 2859  
November 27, 2002

DIEGO F.F. GUTIERREZ  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2800